

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) A video recording apparatus comprising:

composite video image generating means for generating reduced signal video images, each comprising less than a complete screen by reducing the number of pixels to be displayed of each of a plurality of video images supplied from frames of each of a plurality of input data streams, a frame from only one of each of said plurality of input data streams being supplied at a time, and generating a composite video image by compositing the generated reduced video images in a substantially non-overlapping manner;

additional information generating means for generating additional information for each of the supplied video images;

dividing means for dividing a memory of said recording apparatus into a plurality of blocks, each of said plurality of blocks having a reduced video image, said reduced video image of each block being a composite of images from each of said plurality of input streams;

video recording means for recording the composite video image and the additional information onto a predetermined recording medium in such a manner of maintaining the correspondence between each of the reduced video images included in the composite video image and each additional information; and

recording mode switching means for switching the recording from recording the composite video image to a full recording mode for recording one of said video images when a predetermined condition for said one of said video images is met;

wherein the predetermined recording medium is a tape medium for recording the composite video image in a series of tracks; wherein each track has a video auxiliary area for recording the additional information; and

wherein the additional information recorded in the video auxiliary area comprises frame division configuration information indicative of an arrangement and a maximum number of reduced video images in the composite video image, recording apparatus identification information for identifying a video recording apparatus used for recording each of the reduced video images, and contents information regarding a contents of each of the reduced video images included in the composite video image.

Claim 2. (Original) The video recording apparatus according to claim 1,
wherein the composite video image generating means performs a predetermined image compression to a video image obtained by combining the reduced video images and outputs the compressed video image as the composite video image.

Claim 3. (Canceled)

Claim 4. (Original) The video recording apparatus according to claim 1,
wherein the recording means records the composite video image and the additional information onto the same recording medium.

Claim 5. (Original) The video recording apparatus according to claim 1,

wherein the supplied video images are video images intermittently captured by switching the video images outputted from video supply sources in a time division manner.

Claim 6. (Currently Amended) The video recording apparatus according to claim 1,

wherein the additional information includes at least one of supply source information indicative of each of supply sources of the supplied video images, and recording date and time information indicative of date and time on/at which each of the video images is recorded, ~~frame division configuration information indicative of the arrangement and the maximum number of reduced video images in the composite video image, recording apparatus identification information for identifying the video recording apparatus used for recording, and contents information regarding the contents of each of the reduced video images included in the composite video image.~~

Claim 7. (Original) The video recording apparatus according to claim 1, wherein the supplied video images are video images outputted from a plurality of video cameras.

Claim 8. (Original) The video recording apparatus according to claim 7, wherein the supplied video images are video images intermittently captured by switching the video images outputted from the video cameras in a time division manner.

Claim 9. (Canceled)

Claim 10. (Currently Amended) A centralized monitoring recording system comprising:

a plurality of input devices for capturing and outputting video images;

composite video image generating means for generating reduced signal video images, each comprising less than a complete screen by reducing the number of pixels to be displayed of each of a plurality of video images supplied from frames of each of a plurality of input data streams, a frame from only one of each of said plurality of input data streams being supplied at a time, and generating a composite video image by compositing the generated reduced video images in a substantially non-overlapping manner;

additional information generating means for generating additional information for each of the supplied video images;

dividing means for dividing a memory of said recording system into a plurality of blocks, each of said plurality of blocks having a reduced video image, said reduced video image of each block being a composite of images from each of said plurality of input streams;

video recording means for recording the composite video image and the additional information onto a predetermined recording medium in such a manner of maintaining the correspondence between each of the reduced video images included in the composite video image and each additional information; and

recording mode switching means for switching the recording from recording the composite video image to a full recording mode for recording one of said video images when a predetermined condition for said one of said video images is met;

wherein the predetermined recording medium is a tape medium for recording the composite video image in a series of tracks; wherein each track has a video auxiliary area for recording the additional information; and

wherein the additional information recorded in the video auxiliary area comprises frame division configuration information indicative of an arrangement and a maximum number of reduced video images in the composite video image, recording apparatus identification information for identifying a video recording apparatus used for recording each of the reduced video images, and contents information regarding a contents of each of the reduced video images included in the composite video image.

Claim 11. (Currently Amended) A video recording method comprising the steps of:

generating reduced signal video images, each comprising less than a complete screen by reducing the number of pixels to be displayed of each of a plurality of video images supplied from frames of each of a plurality of input data streams, a frame from only one of each of said plurality of input data streams being supplied at a time and generating a composite video image by compositing the generated reduced video images in a substantially non-overlapping manner;

obtaining additional information for each of the supplied video images;

dividing means for dividing a memory of said recording apparatus into a plurality of blocks, each of said plurality of blocks having a reduced video image, said reduced video image of each block being a composite of images from each of said plurality of input streams;

recording the composite video image and the additional information onto a predetermined recording medium using said recording apparatus in such a manner of maintaining the correspondence between each of the reduced video images included in the composite video image and each additional information; and

switching the recording from recording the composite video image to a full recording mode for recording one of said video images when a predetermined condition for said one of said video images is met;

wherein the predetermined recording medium is a tape medium for recording the composite video image in a series of tracks; wherein each track has a video auxiliary area for recording the additional information; and

wherein the additional information recorded in the video auxiliary area comprises frame division configuration information indicative of an arrangement and a maximum number of reduced video images in the composite video image, recording apparatus identification information for identifying a video recording apparatus used for recording each of the reduced video images, and contents information regarding a contents of each of the reduced video images included in the composite video image.

Claim 12. (Original) The video recording method according to claim 11, wherein the step of generating the composite video image includes a step of performing a predetermined image compression to a video image obtained by combining the reduced video images and outputting the compressed video image as the composite video image.

Claim 13. (Canceled)

Claim 14. (Original) The video recording method according to claim 11,
wherein the composite video image and the additional information are recorded
onto the same recording medium in the recording step.

Claim 15. (Currently Amended) The video recording method according to
claim 11,
wherein the additional information includes at least one of supply source
information indicative of each of supply sources of the supplied video images, and recording
date and time information indicative of date and time on/at which each of the video images is
recorded, ~~frame division configuration information indicative of the arrangement and the~~
~~maximum number of reduced video images in the composite video image, recording apparatus~~
~~identification information for identifying a video recording apparatus used for recording, and~~
~~contents information regarding the contents of each of the reduced video images included in the~~
~~composite video image.~~

Claim 16. (Original) The video recording method according to claim 11,
wherein the supplied video images are video images outputted from a plurality of
video cameras.

Claim 17. (Canceled)

Claim 18. (Previously Presented) The video recording apparatus according to claim 1,

wherein said predetermined condition is a notification by an abnormality sensor associated with said video image that detects an emergency.

Claim 19. (Previously Presented) The centralized monitoring recording system according to claim 10,

wherein said predetermined condition is a notification by an abnormality sensor associated with said video image that detects an emergency.

Claim 20. (Previously Presented) The video recording method according to claim 11,

wherein said predetermined condition is a notification by an abnormality sensor associated with said video image that detects an emergency.